

THIS MAINE DAIRY HAS SOME REALLY BIG FANS

Gold Top Farm, a family farm in Knox, Maine, successfully leveraged state and federal cash incentives and grant programs to cover half the cost of its project to upgrade the ventilation in its barn, and is now reaping the benefits of much improved ventilation and lower electric bills.

The twenty-four 4-foot, one horsepower fans in John Ingraham's Gold Top Farm dairy barn were inadequate. In the areas where the fans did move the air, the 375 Holstein cows bunched together, creating more heat and heat stress, which directly affected their health, milk productivity, and reproduction. In the winter, the heat from the cows, combined with a lack of ventilation, created condensation on the ceiling that caused damage to the barn roof.

Mr. Ingraham visited Taylor Farms in Saint Albans, which had installed Big Ass Fans®. Big Ass Fans are very large, high volume, low speed fans that provide greater air circulation and use less electricity than the alternative – which is the use of many more small fans. He consulted with his equipment supplier, Paul Brooks of Paris Farmers Union, a Program Ally of the Efficiency Maine Business Program. Mr. Brooks informed Mr. Ingraham that his purchase of energy saving Big Ass Fans would make him eligible for a cash incentive from the Efficiency Maine Business Program. Mr. Ingraham decided to have three, 24-foot Big Ass Fans installed, instead of adding more of the smaller fans. Based on an estimated savings of 89,856 kilowatt hours annually, Gold Top Farm received a cash incentive of \$4,133, which equaled about 25% of the cost of the project, from Efficiency Maine.

(for more of this story see other side)



Big Ass Fans® are high volume, low speed, 8 to 24-foot fans with variable speed frequency drives. These fans can move up to 246,000 cfm (cubic feet per minute) of air over an area as large as 20,000 square feet for about a nickel an hour. The fans are virtually maintenance free, make little noise, and are credited with causing barn birds to leave the building.



GOLD TOP RECEIVES OVER \$8,000 FOR FANS



Moral of the Story:

SOMETIMES ONE BIG SAVINGS DESERVES ANOTHER

(continued from other side)

Tim Clark, Small Business Coordinator for Efficiency Maine, notified Mr. Brooks that Gold Top Farm might also be eligible for a grant through the Renewable Energy/Energy Efficiency 9006 program offered by the United States Department of Agriculture's (USDA) Rural Development Agency. Gold Top Farm applied and was one of 167 recipients from 26 states to benefit from these competitive grants to promote energy efficiency improvements and develop renewable energy systems. Gold Top Farm was the first Maine recipient and received a \$4,462 grant through this program.

Gold Top Farm expects to save more than \$8,000 annually from the efficiency improvement; savings that go straight to the dairy farm's profits. The Efficiency Maine cash incentives, along with the Rural Development grant, will ensure a short payback period for the dairy farm's investment. Mr. Ingraham said, "We could feel a big difference in the summer and are hopeful the new fans will help in the winter as well. We are happy to be seeing lower energy bills. The paperwork wasn't too bad, and we were very pleased to receive so much help financing this investment."

Rural Development State Director Michael W. Aube commented on the funding, "The installation of these fans will have an immediate and positive impact here at Gold Top, leading to increased energy efficiency, healthier livestock, and higher productivity. This is a terrific example of the accomplishments that can be made when state and federal agencies work together."



Tim Clark, Small Business Coordinator for Efficiency Maine with Gregory and John Ingraham of Gold Top Farm.

Not only did the Ingrahams save over \$8,000 on the installation of these fans, they now stand to save that amount annually on electricity.



"Efficiency Maine was pleased to bring information regarding these federal funds to our Maine farming community," stated Efficiency Maine Program Manager Linda Viens. "We encourage farmers and business owners alike to learn more about various ways to install energy efficient electric equipment."

Who You Know Does Count:

MORE INFO ABOUT THESE TWO MONEY SAVING PROGRAMS

USDA Rural Development

The USDA Rural Development's mission is to deliver programs in a way that will support increasing economic opportunity and improve the quality of life of rural residents. The Renewable Energy Systems and Energy Efficiency Improvements program was created as part of the 2002 Farm Bill to assist farmers, ranchers, and rural small businesses to develop renewable energy systems and make energy efficiency improvements to their operations. Further information on rural programs is available at a local USDA Rural Development office, or by visiting the USDA's Web site at: www.rurdev.usda.gov.

Efficiency Maine Business Program

The Efficiency Maine Business Program promotes the installation of energy efficient electric equipment to Maine businesses, farms, nonprofits, public and private

(K-12) schools, water and wastewater facilities, and local and county governments. Further information about Efficiency Maine is available by calling 866-376-2463 or by visiting the Web site: www.efficiencymaine.com.



Efficiency Maine is a statewide effort to promote the more efficient use of electricity, help Maine residents and businesses reduce electricity costs, and improve Maine's environment. Efficiency Maine is funded by electricity consumers and administered by the Maine Public Utilities Commission. This document was paid for by appropriation 014-65A-0967-012.